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           Z*NET: ATARI ONLINE MAGAZINE

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THE EDITORS DESK
By Ron Kovacs
--

IT WAS JUST A DREAM!

It is a weird feeling when you fall asleep and think you ended
publishing a popular online magazine. Damn, what a dream it was....

It started out simply by the release of an announcement saying that
we were going to become an new online magazine, being assisted by the
folks at Atari and my good friends Bobby and Pam. It seems to go on
for months, through the summer and into the fall. Time would just fly
by, issue after issue was released and then a terrible accident
happened!

My good friend Bobby was hit by a car, believe it or not, driven by
his sister-in-law! It was a shock indeed! Bobby died a few days later,
was buried and then the alarm clock went off. Sheesh!! Was it real or
just a dream? After awaking, I know I didn't have any friends named
Bobby or Pam and Z*Net really didn't go away!

Seriously, thanks for downloading Z*Net Atari Online Magazine. The last
issue we published appeared last April and changed to Atari Explorer
Online Magazine on May 1, 1992, which continues today under the direct
editing of Atari Corporation. Some of the Z*Net staff will be assisting
the new staff of AEO from time to time, so don't be surprised seeing our
names in the online in future releases.

There has been a lot of speculation as to why the return of Z*Net, and
more recently, rumors spreading about a falling out or even something
more disasterous. There is nothing further from the truth about the
seperation, it was amicable, friendly and our relationship remains
very strong. Our hopes are that the two online magazines enhance each
other.

Z*Net returns to weekly release dates and as in the past, will be
released AFTER 9pm eastern time on Friday evenings. (That is after we
release this edition) After validation, you should see all issues on
GEnie and CompuServe.

Note: There are two Degas pictures attached to this edition that are
part of the Exclusive Falcon article from AtariUser Magazine.

THE Z*NET NEWSWIRE
Latest Atari News and Industry Update
--

RIGHT SIZING STILL SHAKING ATARI
Atari Corp continues to re-shape itself in preparation for 1993's
marketing of their new products. Trimming more people and places from
the expense column this fall is the announced closing of Atari's Dallas,
Texas research and development labs. Forty employees and programmers
working there have been offered relocated jobs at the Sunnyvale,
California headquarters of Atari. It's said that a few employees who
are now job shopping have a resume entry that states that their latest
completed project was the Atari 68040 design. Atari similarly
dismantled the Lombard, Illinois LYNX development labs earlier in 1992.

Eric Smith, the original MiNT multitasking programmer whose project is
the basis for the upcoming MultiTOS, started full-time work at Atari
Corp in early November. Meanwhile, TOS team programmer Ken Badertscher
has accepted a position with Taligent, the IBM/Apple project consortium.

At the management level, Atari's rising marketing/development star
Bernie Stolar resigned in October. Bernie's accomplishments during his
9-month stay included many game development contracts for Atari
computers, management of the consolidation of the Entertainment
division, and hiring of the new Atari Explorer magazine staff.

Also leaving is long-time head of Atari Germany, Alwin Stumpf. Guesses
as to why include observations that Alwin's hard-line high-market
orientation conflicts with the current Atari direction of consumer-level
penetration. Confusing Alwin's departure is a message signed with
Stumpf's name that has been circulated online and in some publications
that profess to explain why MultiTOS and FSMGDOS are being delayed
(contract problems) and a statement that the Falcon030 will NOT be
produced as shown. The message has been discredited as a fraud, as have
followup messages in the same network purporting to be from Sam Tramiel
and Jesus of Nazareth. The content of the "Stumpf" message has been
denied vehemently by Atari and Stumpf co-workers, as well as disproved
by other events (such as Eric Smith's hiring).

Remaining Atari officials have been scurrying and working late to
prepare for the mid-November Las Vegas COMDEX appearance for Atari.
Holding the largest booth and the best located real estate in the huge
Sands Convention Center for the worlds largest computer trade show,
Atari is still mum about what they'll display. Speculation runs from a
two-piece Falcon to a 68040 or even a sneak look at the Jaguar game
console. Whatever it may be, Z*Net will be there, and we'll show and
tell you later this month.

WAACE: DC AREA FEST ANOTHER HIT
The Sheraton Reston in Virginia had another full house at this year's
WAACE Atari festival, October 10th and 11th. Officially attended by
1,200 to 1,400 people, down from last year's 2,000, 40 vendors still
made their traditional record breaking sales this year. Inclement
torrential rain leading up to the Columbus Day weekend didn't aid the
turnout.

Atari was able to send Bill Rehbock and several Falcons to spice things
up, and Bill also spoke at seminars and the Saturday night WAACE
Banquet. The technical manager from Atari told of SUTRA, a Microsoft-
Works type integrated program, developed in India, that Atari is
prepping to either bundle with all Falcons or to sell cheaply as a
competent do-it-all starter package. Demos of the Falcon and Speedo-

FSMGDOS were met with happy but impatient crowds.

Most show-goers got a free copy of the just-released October AtariUser
at the CodeHead and PMC booths while checking out Warp 9 and Gemulater,
respectively. Other hot items were: Dave Small (with videotape
annotated seminar) speaking of Spectre GCR version 3.7 to come and
showing a Falcon opened up; Missionware's completed but still being
updated Flash II and Cyber Paint (now working on STe and TT machines);
Lexicor with JRI GenLock boards for the Falcon and showing Phoenix 512,
like Spectrum 512 but for the true-color modes of the Falcon; Bob
Luneski's Diamond Edge and Diamond Back II; Wintertree's Spelling
Sentry; Computer STudio with deals on hardware and software (six TT's
went out from STudio alone); and the DMC/Calamus/FastTech/GEnie booth.
Other retailers of note included Toad, Joppa, and CompuSeller West.

Seminars and special topic rooms are the special forte of the WAACE
show, with a schedule that went on and on. While some were lightly
attended, others were big hits. Dave Small and Bill Rehbock
understandably made the biggest impact, drawing enough people to nearly
empty the sales floor. Seminars on DynaCADD and Calamus, "Meet the
Atari Press", telecommunication services (featuring early Atari
personality Neil Harris, now of GEnie), etc., did well too. A swap
room, a MIDI demo room, and an education room each held bustling crowds
and great exhibits.

WAACE organizers Ken Fassler, Russ Brown, and J.D. Barnes are all to be
congratulated again this year for bringing a professional quality Atari
show together. As always, plans have already been tossed around as to
what to do next year, for another Atari date to remember.

MONTREAL FAME
FAME 1992 was the Festival Atari de Montreal et Environs, held the
weekend of September 19 and 20. It was the first Atari Fest held in
Canada's Montreal area in four years, and was organized by the Atari
ST/MEGA Users Montreal (ASTMUM) and the Montreal Atari Club de Montreal
(MACAM). Although attendance was only about 200, organizers call FAME a
success. Vendors included MACAM with intriguing "extended calculators"
that work with word processors or spreadsheets, designed to handle data
and variables used in chemical calculations and statistics. Microdel,
ALP Micro Systems, Progeni Computers, and Italmelodie Music also were
exhibiting at FAME. ASTMUM focuses on musical and artistic uses of
Atari computers, and their members consist of MIDI musicians, composers,
videographers, artists, technicians, and business people.

NORTH CAROLINA SHOW ON AGAIN
After a pair of cancellations for 1992 dates in the San Francisco area,
The Sacramento Atari ST Users Group (SST) has elected to go it alone and
announce the Sacramento Atari Computer Exposition (SAC Expo) for March
13th and 14th in Sacramento, California. The earlier events were
planned as cooperative efforts with Bay area clubs. SST plans a full-
size two day affair, held in the special events area of the Towe Ford
Museum, home of the worlds most complete antique Ford automobile
collection. Admission to the museum will be free for those who attend
the SAC Expo. The museum is located at the intersection of Interstates
5 and 80, just 15 minutes from the Sacramento Metropolitan Airport.
Hotel reservations are available by contacting Mark or Dell at Sports
Leisure Travel, 800-321-4758. Vendor packets have been mailed to the
developers and vendors contacted by SST at the Glendale show in

September. Contact the SAC Expo through Nick Langdon (Vendor
Coordinator), C/O SST, P.O. Box 214892, Sacramento, Ca 95821-0892, or
call 916-723-6425. GEnie: M.WARNER8.

AARI HONG KONG ON GENIE
Jon Clarke of Z*Net's Global News Gateway offered a first on GEnie in
September when he hosted a worldwide real-time conference from the head
office of the HongKongBank in Hong Kong. Although Jon normally does
business for a New Zealand banking service, he reports in from various
ports around the world as his business takes him abroad. How's the
Atari market in Hong Kong? Cheap. Although there are actual Atari
dealers, the prices are depressed due to both the trading rate of US
currency and the presence of "backdoor" units on the market, not clones,
but production from the local factories that "leak" out the back door.
Jon reported that he bought a used Lynx for $1 US, and that game carts
run about $4 each. He told of the Golden Shopping Center in Sham Shu
Poo, with over 1,000 computer stores (!). A 4 meg STe was about $150 in
US currency. All games and most programs are $4 each, with open piracy
by the shop owner. "Just point to the software and it is copied while
you wait." The dealer only needs one copy for the duration of his
dealership. Jon added that this was mainly in the Kowloon markets, not
in the "high street" stores. GEnie will soon be opening up consumer
services in Hong Kong, where Jon reports there are now about 150 private
BBS systems operating, including some for the Atari. The Atari
Roundtables on GEnie are official information services of Atari
Corporation. To sign up for GEnie service, call (with modem) 800-638-
8369. Upon connection type HHH (RETURN after that). Wait for the U#=
prompt. Type XJM11877,GEnie and hit RETURN.

C-LAB FOLDS, EMAGIC TAKES OVER
Internal company unrest and division has brought C-Lab, developers and
manufacturers of the most successful Atari MIDI sequencing programs,
Creator and Notator, to an end. C-Lab products will be taken over by a
new company formed by Ensoniq, the US distributors of C-Lab as well as a
line of electronic hardware for the music industry. EMAGIC will
maintain support and development of the Atari platform, and includes
some of the same people who were C-Lab. Notator 3.1 was recently hailed
in Keyboard magazine as the best MIDI sequencing program available for
any computer. Announcements from Ensoniq about Emagic include news of
"Notator Logic" for the Macintosh, to be released before the end of
1992. Emagic joins Steinberg/Jones and Barefoot Software as the major
remaining MIDI developers for Atari computers. Barefoot formed from the
Hybrid Arts takeover this summer, and Dr. T's stopped developing for the
Atari in 1992. Contact Emagic through Ensoniq Corp, attention David
Netting, 155 Great Valley Parkway, Malvern, CT 19355, 213-647-3930,
extension 297.

ICD PRO
The favorite for many Atarians, ICD's hard drive software and utilities
are heralded for quality, speed, and comprehensive coverage. And it all
works only when used with an ICD host adapter or Link. Until now. ICD
is coming to grips with the fact that their software won't be used on
Falcon and TT computers once SCSI connectivity becomes the norm, as no
host adapter is used. Plans are being finalized for a "PRO" version of
ICD's software to give access to all the features without a hardware
requirement. Pricing is not settled but is expected to be in the $50
range. Fears of rampant piracy of the desirable software have prevented

ICD from making it operate without their hardware online until now.

ZUBAIR TO OFFER FIRST FALCON UPGRADE
Zubair Interfaces has developed Z-RAM/Falcon, a 4 or 16 Megabyte upgrade
board for the as yet unavailable Atari Falcon030. The compact four
layer circuit board is completely compatible with Atari's own board.
The Z-RAM board features low profile machined sockets, allowing the user
to purchase the board and plug in as much RAM as desired. The board has
two connectors and simply plugs into the motherboard. Owners of a
Falcon030 with 1 Meg of RAM can simply pull out their 1 Meg board and
plug in the Z-RAM/Falcon board. Populated with 32 1 Megabit RAM chips
(1 Megabit x 1 configuration), the board becomes a 4 Megabyte upgrade.
Or use 32 4 Megabit (4 Megabit x 1) RAM chips, and the board becomes a
16 Megabyte board (14 Megabytes is addressed by the system, two
megabytes overlap the Falcon TOS address space and is not usable). The
suggested retail price of the bare board (without RAM) is $249.95 and
volume shipments will start in mid-November. Zubair Interfaces, Inc.,
5243-B Paramount Boulevard, Lakewood, CA 90712, phone 310-408-6715.

NEW 8-BIT CATALOG
The Winter catalog from B&C Computervisions is now available. The 32
page booklet is full of accessories, parts, software, and hardware
offers Atari systems, including lots of 8-Bit products, but plenty of
Lynx and ST/STe/TT support as well. Get yours by sending for $1 to
cover shipping to B&C COmputervisions, 2730 Scott Boulevard, Santa
Clara, CA 95050, phone 408-986-9960.

SALES SOFTWARE UPGRADE
Hi-Tech Advisors announced new versions of their respected Sales-Pro
point-of-sale software. Now at version 6.20, the cash drawer-to-
inventory modular system has added improved back-order facilities, more
versatile customer histories, and assorted speed and cosmetic
enhancements. All new is another version of the software that is
customized for decimal portion tracking and billing, handier for
businesses that charge by weights or time. The SalePoint and Sales-Pro
series begin at $99 and run up to $599 for complete systems with mail-
merge, floor planning, service and repair, purchase orders, etc..
Contact Hi-Tech Advisors for demo disks and information at Box 128,
Ravena NY 12143-0128, phone 800-882-4310.

HIGH-DOLLAR RAM
Computer memory prices have skyrocketed since the US Department of
Commerce's preliminary determination that Korean microchip makers were
dumping (selling below cost) chips on the US market, attempting to gain
a long-term market advantage by forcing competition out of business.
Tariffs may be placed on some of the companies involved after the first
of the year, but the market has reacted with panic for fear of shortages
or later, still higher prices. Bonds against future tariffs could go as
high as 90% of the sales price of SIMMS memory chips, recently available
for as low as $28 per MEG. Now, suppliers are not guaranteeing prices
for more than a day or two at a time, with prices jumping 100% in a
week's time. Regardless of the fact that imported SIMMS boards are the
only ones currently targeted by the probe and tariff proposals, all
configurations of memory chips have gone up in price as the market
braces for what might be ahead. Buyers are advised to put off buying
until the panic eases, as Japanese and other maker chip prices should

have not been affected, and should return to near normal prices within
weeks.

PIRACY: A FELONY?
The Software Publishers Association or SPA has come out in favor of a US
Senate bill which would make intentional software piracy a felony from
the current status of a misdemeanor. Senate bill S-893 would only
target big-time pirates, including illegal bulletin board operations,
dealers who "sweeten" hardware purchases by loading up computers with
illegal copies of desirable software, and those who specifically make
copies to resell them at deep discounts on a regular basis. The Piracy
Felony bill would cover illegal copying for "purposes of commercial
advantage or private financial gain" making it a crime punishable with
a fine of up to a quarter million dollars and up to five years for those
making more than 50 copies in a single 180 day period. The same
$250,000 upper fine limit and a maximum prison term of two years could
be imposed for those "willfully" making and selling between 10 and 50
copies.

Z*NET NEWS GROUPS
For the users here on GEnie who have access to internet or usenet you
maybe interested to know that there is now a Z*NET specific area.
alt.znet.aeo <- Atari Explorer Online
alt.znet.fnet<- Z*NETS FNET conferences
alt.znet.pc <- Z*NET PC magazine
If you sysadmin does not carry these topics on your site please ask
him to get them. These news groups are now offered to over 220,000
usenet sites world wide and 40,000 Internet sites worldwide. If your
sysadmin has any quiries please ask them to email us at either ...
                znet@status.gen.nz
or   jonc@status.gen.nz
or   root@status.gen.nz
where we will be happy to help in any way what so ever.

WORDPERFECT LICENSES GRAMMAR CHECKER
WordPerfect signed a license agreement with Reference Software
International for Grammatik 5, a grammar checker. Grammatik 5 will ship
with every copy of WordPerfect 5.2 for Windows, an upgrade to
WordPerfect 5.1 for Windows scheduled to ship the end of November.

APPLE ANNOUNCES NEW PROGRAM
Apple introduced a new assistance program last week that is designed to
spur the development of multimedia products such as interactive books,
music and animated content. This new program, called the Apple
Multimedia Program, will strengthen Apple's partners' abilities to
prosper in the growing areas of multimedia creation and playback, and
provide Macintosh computer users with a broader and richer range of
computer-based information. The newly created multimedia program will
provide multimedia developers with supportive tools and information to
enable them to increase their production of multimedia titles and
products on Apple platforms.

NEW HIGH-VALUE NOTEBOOK FROM ZENITH
Zenith Data Systems has introduced four new notebook personal computers
that blend performance, affordability and quality. The four models

feature the 386SL microprocessor from Intel, which is optimized for portable computing to conserve battery power. All four ZDS-600nl notebook PCs are a compact 11 inches (W) x 8.5 inches (D) x 1.9 inches (H) and weigh 6.5 pounds with a NiCad battery.

MEGAMEDIA 486-66DX2 MULTIMEDIA TV SYSTEM
Megamedia Computer has introduced the Mega 486-66DX2 Multimedia TV system. The Mega Model M46D2T comes standard with 4MB RAM, TEAC 1.2 and 1.44MB floppy drives, Quantum 244 MB hard drive, TV/Video tuner, NEC Multispin CD-ROM, Sound Galaxy Pro sound card, SVGA monitor, DOS 5, Windows 3.1, speakers, microphone, and headphone. The Mega M46D2T has a built-in TV tuner, hi-fi stereo amplifier, and full motion video window capabilities. Software for controlling audio, video, and TV in DOS and Windows is included. It allows users to tune in to a financial news channel in one corner of their screen, and work on their spreadsheet at the same time. Now users can play software training tapes on their VCR and watch the video in a window while learning to use new software. It has a built-in 122 channel cable-ready TV tuner. The system displays sharp, flicker-free TV on the full VGA screen with more than 2 million colors. With a keystroke, users can switch between full screen TV and TV-in-a-window. The TV window can be re-positioned or resized on the screen. Another unique feature is its ability to automatically search through all available TV channels. Users can then add or delete channels from the channel list. Built-in audio and video switchers allow convenient selection of audio and video sources through software. It hooks up to a VCR, video camera, camcorder, laserdisc, CD-ROM, or other audio/video source. The Mega M46D2T lists for $3995. The system is MPC approved and comes with an 18 month parts and lifetime labor warranty. It is available direct from Megamedia. Megamedia Computer is located at 1701-D Fortune Drive, San Jose, CA 95131. (800) 634-2633. (408) 428-9920.

BROTHER ANNOUNCES NEW 10PPM POSTSCRIPT PRINTER
Brother announced the HL-10PS, a 10 page-per-minute, 300 dpi, PostScript language emulation desktop laser printer with a suggested retail price of $2,395. The many features and design of the HL-10PS make it equally appropriate for use by a single user or in a network environment. In addition to supporting BR-Script, the HL-10PS emulates the HP LaserJet III (PCL 5 with HPGL/2). Automatic emulation switching is another productivity and auto-intelligence feature of the HL-10PS. The printer comes standard with BR-Script and Hewlett Packard LaserJet III (PCL5) emulations. The HL-10PS can sense which type of data it is receiving and will automatically select the proper printer emulation. Also incorporated into the HL-10PS is automatic Data Compression. This feature in graphics mode operates transparently and requires no user interaction. Data Compression reduces the file size while maintaining no loss of data. This allows more information to be processed and transferred faster with less memory requirements. The HL-10PS comes with 2 MB of RAM standard. Expansion up to 6 MB of total on board memory is easily achieved by adding industry standard SIMMs. Additional memory upgrade options available are: the MB-1000 ($149 SRP), a bare board that can be populated with either 2 or 4 megabyte industry-standard SIMMs; the MB-1020, a 2 megabyte board ($319 SRP); and the MB-1040 ($699 SRP), a 4 megabyte board. For more information, contact John Wandishin, director of marketing, Office Systems Division, Brother International Corp., 200 Cottontail Lane, Somerset, NJ 08875-6714, (908) 356-8880.

AMERICA ONLINE SERVICES OVER 200,000 HOMES

America Online announced last week that more than 200,000 households are now subscribing to the company's popular consumer online services. This represents a 40 percent increase over the approximately 143,000 households the company had at this time last year. Last month, The Wall Street Journal compared America Online to Prodigy and Called America Online "the sophisticated wave of the future."

IBM $5.5 MILLION COMPUTER DONATION
IBM has started delivery of more than $5 million in PC's that it donated to Dade County schools ravaged by Hurricane Andrew. To date, IBM's donations total nearly $10 million in cash, equipment, personnel and office space. A convoy of trucks and vans left the IBM facility at Boca Raton and headed for Homestead and South Miami, where many schools' computer labs were severely damaged or wiped out completely. The trucks were accompanied by IBM installation teams. Each team was dropped off at a school to unload and set up the computers, while the convoy headed to the next school. IBM's strategy is to deliver and install computers at 15-20 schools a week through November. Each school gets 20 computers wired into a network that lets the teachers interact with the students. Besides the 2,000 personal computers, IBM will provide the schools with training for teachers as needed, 100 larger PCs for teachers to interact with the students' computers, and 100 printers donated by Lexmark, an IBM subsidiary.

NINTENDO OUTFITS BASEBALL'S ALL STAR TEAM
Nintendo outfitted the 25 members of baseball's traveling All Star team with personal hand-held Game Boy video game systems for their travels to and through Japan. The software title "Game Boy Baseball" was one of 25 cartridges included in a library of game packs provided for the players. In addition, each player received a copy of the international puzzle game Tetris. A total of 90 systems were donated, including those to non-playing members of the tour.

WORDPERFECT SUPPORT FOR WIRELESS
WordPerfect announced last week that it will develop a gateway to link WordPerfect Office 4.0 users to RAM Mobile Data's wireless network system. According to company officials, this development indicates WordPerfect's continuing commitment to expand WordPerfect Office connectivity. WordPerfect Office is an e-mail, calendering and scheduling product that now has more than 1.2 million users. WordPerfect Office is currently available on DOS, Windows, Macintosh, UNIX and VMS platforms.

GROUPS JOIN FORCES
The Desktop Management Task Force (DMTF) and the Distributed Support Information Standard (DSIS) Group jointly announced their cooperative effort to facilitate and enable simple desktop management. The DMTF, composed of Digital Equipment, Hewlett-Packard, IBM, Intel, Microsoft, Novell, SunConnect and SynOptics Communications is providing a common method to access desktop and component information. The DSIS Group, composed of Bell Atlantic Business Systems, Digital, HAL Computer, Hewlett-Packard, ICL PLC, Microsoft, Olivetti and Sun Microsystems, is defining the necessary desktop and component information (object definitions) to populate a MIB (Management Information Base). The culmination of these efforts is expected to result in well-managed desktop systems and lead to the creation of both local and network

applications to manage components. By taking advantage of these standards efforts, component manufacturers will be able to offer simple management with their products. The goal of both groups is to enable desktop management with an architectural model that is open, independent of protocols, operating systems and network operating systems, and able to port to multiple environments, such as IBM-compatible PCs, UNIX, Apple Macintoshes and so on. Companies interested in the DMTF's efforts can obtain information by contacting Chris Thomas at (801) 379-2251. Additional information on the DMTF is available via fax through Intel's 24-hour automated FaxBACK information service. FaxBACK can be reached at (800) 525-3019 in the United States and Canada, at 44-793-432-509 in Europe and at (503) 629-7576 in other international areas. Request Document No. 5570 for the DMTF Charter; Document No. 5571 for DMTF news releases; and Document No. 5572 for a DMTF white paper. Those interested in the DSIS Group's efforts can obtain information by contacting Ray Edgerton, DSIS Group chairman at (215) 296-6159.

ATARI EXPLORER ONLINE CHANGES
Changes are on the horizon for Atari Explorer Online, however, they are positive. Ron Kovacs, editor of AEO has moved to contributor status and remains part of the staff while the editor status is taken over by yet an un-named person. Atari Explorer will continue publishing the online and will return to regular release in November. Ron Kovacs stated, "I will begin re-publishing Z*Net Atari Online Magazine and the other Z*Net projects shortly." He went on to say, "Due to the amount of time required to manage AEO over the last few months, I was not able to watch the other Z*Net interests. Also, with Atari preparing and launching new products, attending user group events, and setting up Comdex attendance, the ability to deliver regular issues was difficult." According to Kovacs, "his goal and hopes are that both publications enhance one another and provide the Atari user with the latest information and feature articles."

ELITE 2 COMING IN NOVEMBER
Konami will release Elite 2 in November after a four year development. Elite 2 will use the Mega STe's 4096 color palette and increase the world total from 2000 in Elite 1 to over 100,000 covering over 70,000 light years of area. Elite is a space trading game where the user trades for goods through a number galaxies. It was originally released in 1983.

THE FALCON: CLOSE-UP AND INSIDE
Exclusive From AtariUser Magazine
By John Nagy
--

Sightings began in Germany in April 1992, but even by that time, the Atari public knew some of what to expect. A little at a time, more details leaked out from every corner of the world. Before the Falcon030 made its first public showing (again in Germany in September), we had

collected hundreds of pages of information, some detailed and some in
rough rumor form.

Then, after online conferences by Atari officials and technical experts,
a sneak preview of the machine at the Glendale show, and the final
official rollout at the Boston Computer Society meeting, the lid came
off. Figuratively and literally. The first photos of a production
Falcon, inside and out, are now yours, here, now, along with more real
Falcon operational information than has been assembled in one place to
date. Also, see last month's AtariUser for the full official Falcon
specifications, and check out the Glendale Show and Boston Computer
Society coverage in the NewsEdge of the magazine.

Outside

Unassuming to look at, the Falcon030 shown to date is to be in standard
ST grey, looking like a 1040STe but for dark keys with white letters and
a multicolored "ATARI" logo on the otherwise familiar front panel ID
flag. Even before it was shown at Atari Messe, there was much talk
about a rumored "business Falcon" with this model seen as an
introductory version or game machine.

Although Atari denied that another version of the Falcon would be coming
anytime very soon, Jerry Pournelle of Byte Magazine says he was told
that a tower/separate keyboard version might be shown as soon as at the
November COMDEX. It might not be commercially available until sometime
in 1993, when rumors also say that there will be at least one 68040
model Falcon above the Falcon030 and at least one Falcon model BELOW the
currently shown Falcon030.

Inside

The Falcon is everything that an STe is, plus more of it. It operates
the same familiar way with the GEM desktop, but the differences show up
as you work with it. The differences are the CPU (a Motorola 68030 at
16MHz instead of a 68000 at 8MHz), a new operating system (TOS) that can
use the higher functions of the new CPU, a digital signal processor
(DSP, for incredibly fast manipulation of any signal), plus vastly
enhanced audio and video.

TOS 4.0 is part of the new Falcon. The TOS ROM (now one chip) contains
all the difference resources for each country, including German,
English, French, Italian, Spanish, Swiss German, and Swiss French. The
country and appropriate keyboard layout are stored in Non-Volatile RAM
and read when the Falcon030 starts up. A CPX that will allow you to
configure the Falcon030.

"Falcon TOS" internal support for programmers to control hierarchial
menus, pop-up menus, 3-D window and dialog objects, and full-color
animated icons. When you select an icon, it will flip to a second
image, giving an animated effect. While much has been said about the
new icons, they add more to owner pride than to operational value.

MultiTOS, the multi-tasking environment, is not yet in the ROM, and may
be having some problems in late development. Reports are mixed as to
the stability of the system, mostly due to programs that were written to
assume they alone "owned" the computer. The easiest way to understand
MultiTOS is to think of every application as though it were a loadable/
unloadable Desk Accessory, available and running at all times regardless
of what else is running. Compatibility will have to be bulletproof

before Atari releases it on ROM; in the meantime, a disk loaded
extension system is being used for developers, and this might be the way
MultiTOS starts off in commercial release.

Features of MultiTOS include expanded interprocess communication and
drag and drop standards. You can grab a file from a open desktop
window, drop it on a window of a currently running application, and that
application will react accordingly. It can also minimize windows and
applications so that the desktop doesn't get cluttered.

It's too early to say whether or not the features of TOS 4.0 will be put
together into an upgrade kit for older TOS machines. But MultiTOS is
planned for use on TT machines after it is available on the Falcon.
Other ST's may never get a version, as the memory management in 68000
computers won't protect separate processes.

The Falcon uses the Motorola 68030 CPU and 56001 DSP, plus a CODEC with
16 bit A-D and D-A converters. Custom chips include VIDEL (handles
video functions, including overlay, overscan, true color); COMBEL
(system manager and BLiTTER); SDMA (sound matrix and sound DMA control);
Keyboard Processor (on board the keyboard, enhanced for higher
resolution mice).

Memory

Debate rages as to why Atari should bother having a 1 meg model of the
Falcon030, as most applications that exploit the power of the processors
will want more. Officials say it's purely economics, to have a base
machine that's as cheap as possible. The Falcon TOS can only "see" 1,
4, and 14 megabyte memory configurations. Unlike the TT, the Falcon is,
out of the box, a 24 bit machine, that is, only the first 24 bits of the
68030 address bus are connected to anything. This is required in order
to be thoroughly compatible with the ST software that is not "32 bit
clean".

Pricing for 1 meg Falcons will start at $799 retail, and 4 meg units
with a hard drive (probably 65 meg) will be $1399. The full-blown 14
meg units might be near $2,000, but Atari won't commit to a price due to
rapid RAM price fluctuations. Other configurations with and without
internal hard drives will be available at intermediate (unannounced)
prices.

Third party development of RAM boards won't take long, as the custom
board has nothing but RAM and a few capacitors, with industry standard
pin connectors. The decision to put RAM on a daughterboard allows
creative possibilities of third-party video and alternative memory add-
ons as well as competitive RAM pricing. A third party can add "TT RAM",
since TOS 4 has all the appropriate support built in. However, adding
TT RAM-type boards will change the system into a 32 bit device, with
both the advantages and the incompatibilities of the TT.

Expansion

Direct access to the DSP (and DMA) is available via a standard (NeXT
type) port on the back of the Falcon. A high-density SCSI II port makes
for instant connection to a flock of third party drives and devices
designed to interface a MAC, Amiga, or NeXT. ACSI (Atari DMA) is gone,
but you can connect most old hard drives by bypassing the host adapter
or use of a third party SCSI-to-DMA adapter, which will also be required
in order to use Atari laser printers.

A math coprocessor socket on the motherboard will allow use of standard 68881 chips to speed up software designed for it, but many designers are more intrigued at the possibilities of using the DSP to do math at even faster speeds.

Of interest to hackers is the internal expansion bus. Consisting of a double set of pin connectors, anything could be attached here. Jumpers are installed from the factory on the "through" lines to the CPU--this means that the installed add-on boards can completely take over the machine at will. That means that a complete 386 or MAC computer (not just an emulator!) can sit inside the Falcon and intelligently talk to the Falcon for peripheral handling. Such a 386SX unit was shown at Atari Messe and might be as cheap as $200.

Audio

The Falcon030 has built-in 16-bit analog-to-digital converters (ADC) and digital-to-analog converters (DAC) that will allow stereo sampling at rates up to 50KHz. The built-in base frequencies are set for STe DMA sound compatibility. The Falcon allows injection of any clock into the sampling system to get 44.1KHz for CD and 48KHz for DAT mastering recorders via an AES/EBU SPDIF interface. It's also possible to use the DSP to correct the system to playback 44.1 or 48 KHz samples. Full 8 track (4 Stereo) recording and editing is possible by adding the external (third-party developed) box with additional DACs/ADCs and clock in it.

The audio system was changed in mid-development based on developer input at CeBIT. The DMA system and DSP interface is now remarkably flexible. The Falcon's SDMA provides a miniature switchboard to connect internal and external inputs and outputs. Any or all of the sources (external audio input, DSP transmit, ADC, DMA playback) can be "patched" to any receiving device (DMA record, DAC, DSP receive, or external audio output). Direct-to-disk recording uses the DMA sound, and need not use the DSP. So, you could be doing direct to disk recording while you use the DSP to add special effects, and still be doing MIDI at the same time. And yes, the Yamaha 3-channel sound of the ST series is still available too--compatibility, you know.

A simple-to-use Stereo direct-to-disk recording and edit system (shown at Glendale and Boston) will be shipping free with the Falcon030 production machines. D2D takes about 11 megabytes per minute of CD quality sound, eating hard drive space quickly!

Video

A chart with comments on the many Falcon video modes concludes this feature--check it for lots of details on what monitors can produce what resolutions.

True Color is the most important advancement in the Falcon video handling. True color differs from paletted colors in that each pixel on the screen can have its own color assigned, and that more colors can be selected from than there are pixels to display them. The Atari Falcon 030 doesn't just offer Super VGA graphics, it has true color 15- and 16-bit modes (up to 640x480 resolution and up to 65,536 on-screen colors).

The Falcon does not have built in abilities to capture video. It can (via a cheap external adaptor) accept external video sync for high-

quality genlock and overlay computer graphics on a video source using
one bit of the 16 bit color information as an overlay bit. When you use
the overlay bit, you get over 32,000 colors (5 bits each for red, green,
and blue values). When you don't use the overlay bit, you have 65,000
colors available (adding a sixth bit for green values).

Alternate video modes can be called via software to achieve special
effects, such as calling a true color overscanned screen (edge-to-edge
picture, like a TV) from other resolution modes, then returning to the
operating mode for user input, such as in a drawing program or game.

Resolution is set by selecting from the "Set Video Mode" dialog/menu
item. Popup one asks for the number of colors (2, 4, 16, 256, True
Color), the second asks the number of columns (40 or 80), and the third
popup depends on the monitor being used. On a VGA Monitor, it says
"Line Doubling (On/Off)" and on a TV or RGB monitor it says "Interlace
(On/Off)."

A standard TV or an ST color monitor like the SC1224 will show all
resolutions except those with 240 or 480 vertical resolutions. Even the
ST High (monochrome) resolution can be shown on a TV or color ST monitor
by using the interlace modes. To achieve higher apparent resolution,
interlace shows every even numbered line in one display frame, then the
odd lines in the next. This adds flicker, but remains quite usable,
especially on a TV which has a longer screen phosphor persistance that
masks the flicker.

A VGA monitor can't interlace, and the bandwidth required to produce
640x480 and 640x240 true color modes is too much for the VGA video
hardware to handle. Therefore, the 640x400 interlaced true color mode
is on the TV/Monitor.

Why so many resolutions? Says John Townsend, "Basically, Leonard
[Tramiel] and I went nuts on the software interface to the video
hardware. If the video hardware was capable of doing a mode and the
mode worked, we allowed for it. The reason I would like to think that
those resolutions might be useful is because they are blindingly fast.
A small screen and a small number of planes, combined with a redesigned
16MHz BLiTTER is equal to screaming eagles!"

The Falcon will know what kind of monitor is attached by what adapter is
plugged in. There's a 15 pin VGA adapter, an ST adapter for SC and SM
monitors, a SCART/Peritel cable, and a composite video/mixed mono audio
adapter. The Falcon will then only offer resolutions that your monitor
can display. Adapters will be sold separately due to the variety of
monitor options.

What Can it Do?

Demos at Atari Messe, Glendale, and Boston leave the imagination
spinning. The real-time Tina Turner video played off the hard disk was
stunning: full motion video in the center of the screen, while selected
still images were repeatedly blitted around the border at breakneck
speed, while CD quality audio was playing. The true-color slide shows
brought oooh's and aaah's from everyone. But what can you expect to sit
down and do with the Falcon that you can't already do with your ST?

A bundle of goodies will be shipped with the Falcon030 to get creative
juices (and fun hormones) going. The most fun at the shows has been via
the D2D audio recorder and editor that also accesses the DSP for special

effects. Set up echo, reverb, phase distortion or flanging, etc. A
visual graphic equalizer is also part of this CD quality recorder. If
you get some effects you like, tie them to keys with SAM, the System
Audio Manager. SAM allows you to use your own (or any standard format
sound file) sounds to replace any or all keyclicks, or accompany the
various AES events, such as window openings and closings, the file
selector, etc.. You can map a particular sound to every key to make a
talking keyboard, a spelling/learning application, or just to fool
around. The sounds will be available in full stereo and/or through a
single internal speaker under the top cover of the Falcon, and they do
NOT slow down the machine while playing.

Want concert and stadium effects for your CD player or surround sound
for your TV? You'd pay as much for audiophile equipment to do these
things as you'll pay for the Falcon itself, and it's set to do that and
more out of the box.

Other inclusions are CalAppt, a Personal Information Manager that has
the ability to import and export delimited file formats as well as
Portfolio databases. ProCalc, a True-Color Breakout game (with
digitized sound), a game called Landmines, and a talking clock accessory
come with the machine, too.

The third party market is gearing up for the Falcon line of Atari
computers as well. At Atari Messe, there were new color versions of the
products from Trade-It (Avant Vector and Repro Studio) and Shift
(Arabesque & Convector). New Falcon software includes InShape, a slick
3D modeler that does Keyframe rendering with ray tracing and texture
mapping in 24-bit animations. Digital Arts (Retouche CD) previewed a
new true-color image editing application. HiSoft showed a true-color
paint package. Eurosoft showed a Falcon version of their Paint package,
Studio Effects. In the USA, Lexicor has project ready for the Falcon,
including the true color drawing system called Mona Lisa, also
compatible with Silicon Graphics workstations.

For business uses, Atari is developing an MS-Works-type integrated
application called Sutra. It reads Excel files and lets you add voice
annotations to cells!

What's next? Lots. The Falcon's DSP can be exploited to produce a
synthesizer which out-performs almost everything. Or, it could be used
as a low-cost video phone (an application that may be ready to show at
COMDEX in November!).

There are many new Atari-specific games on the horizon: SPACE JUNK from
Imagitec Design, a space-oriented adventure game; Road Riot 4WD from
Images, Steel Talons from Koveos, Llamazap from Jeff Minter; Raiden from
Imagitec; and Cyber Assault from Koveos are among them, to be available
between January and June of '93. They'll push the special features of
the Falcon to the extremes.

Meanwhile, the Falcon030 is downward compatible, even moreso than the
TT. PageStream, Calamus, TouchUp, EasyDraw, and all of the favorites
work quite well--and FAST. Not as fast as a TT, but squarely between
the speed of a MegaSTe and a TT030. Preliminary Quick Index numbers (a
benchmark developed by Darek Mihocka) indicate that CPU processes will
be up to 500% faster than an ST, and about half of a TT doing ST
software in ST memory. Software written to addresses the DSP for doing
computations will be much, much faster yet.

Who's Gonna Buy it, and When?

Atari says that the Falcon030 has passed FCC Type B testing (approved
for consumer as opposed to just business sales), and that sales in the
USA can begin almost as soon as the permit tags arrive. The plan is to
place at least two Falcons at every dealer by the end of October, with
sizable production to fill orders by January.

A major power in the advertising industry, Redgate Communications, is
handling PR and advertising in North America. The advertising is going
to be done in close connection with dealers in market areas--it's
useless to advertise where dealers don't yet exist. Southern
California, the California Bay Area, Chicago, and New York will be the
primary targets at first. National sales coverage should be just after
Christmas and into January, with regional advertising tracking the
dealers that order product. The Canadian market will be handled by the
area managers, the same as the USA.

Of course, the Falcon030 will be selling in Europe as well, where the
hard-hit US dollar makes the product even more price attractive. Europe
has far more active high-end developers than the USA, so Atari will be
certain to guard its cash crop with good product delivery overseas. But
Atari is wise to the American users' jealousy of what is quite
reasonable favoritism of other, more profitable markets, and isn't
saying much in public HERE about what they are doing THERE.

So?

The Falcon is coming fast, it's real, and it may bring Atari back to the
forefront of popular computing options. Production and promotion will
be driven by the reception it gets as the Falcon makes its way across
the globe. It might become a revolution; it's at the very least going
to be interesting.

And, like me, I'll bet you'll want a Falcon030 as soon as you can get
it. Regardless of whether it changes the rest or the world, the Falcon
will make home computing better for you and me, the ones who already
know Atari.

GEMULATOR REVIEW
By Don Liscombe

GEMULATOR - RUN ST Software on your IBM CLONE - fact or fiction

A first hand report on the new product for your PC - Gemulator. A
hardware/software combination that allows you to run Atari ST software.
My evaluation is being performed on a 486-50DX EISA machine, with an
ATI Wonder XL video card using a Microsoft bus mouse.

General information:

Gemulator consists of 2 parts, one being an 8 bit card which holds the
TOS roms and is sold by PMC, and the 68000 emulator software comes with
the package (Revision 1.0 - Unregistered). Darek Mihocka, of Branch
Always Software, is selling the Gemulator software as shareware for

$59.95, which will entitle you to printed documentation, and the next
software update. Software updates beyond this point, are $15. The
software loads in and allows you to select items, such as INSTALL (a
specific TOS version), BOTH (floppies), SWAP (A: and B: drives),
FULLSCREEN or WINDOW mouse control, COLOR or MONO, QUICK (screen redraws
for some applications), SPEED (test), REGISTER (information), and QUIT
to DOS mode. Included in the software, is a machine language monitor
program which is accessible from the Gemulator main menu. Depressing
the F11 key, will bring you back to the Gemulator menu, while the F12
key will reboot your "ST".

Installation:

The TOS ROM board is easily installed, in any ISA/EISA slot which works
with an 8 bit card. The circuit board is of a quality design, and all
chips on the board are socketed. The board as shipped, comes with Atari
TOS 2.06, and sockets exist for up to a total of 4 versions of TOS. (A
total of 8 sockets are on the board for ROMS, 2 of them used by TOS
2.06) Written documentation is rather limited, and should you wish to
add additional TOS ROMS to the circuit board, the picture they give
displaying the position of the 6 chip rom set, is barely legible. They
would have been far better off with a hand drawing, than a poor scan of
a photo.

Look & Feel:

The display quality is excellent, both from DOS mode, and from a Window.
One problem Darek makes note of, is when you double click, quite often,
the system does not appear to recognize it. Adjusting the double click
speed with the control panel will remedy this problem, but you will have
to set up a boot disk so that it is adjusted each time you boot up.

GEM screen redraws are slow, and need the assist of a screen accelerator
such as Warp 9 or Turbo ST. Running Gemulator in a Window, makes the
screen display crawl (no one said running a graphics display in a Window
would be fast) using Windows 3.1, but it seemed to run a bit faster in
an OS/2 Dos Window (sorry Microsoft).

Requirements :

For this 2 meg ST emulator, you will require at least 5 megabytes of
RAM, which will require you to make use of your PC hard drive, to
emulate RAM using a virtual device driver supplied. With 8 Megs of RAM,
Gemulator does not require the virtual ram. The software will work with
either 3.5" or 5.25" floppy drives, and disk I/O speed seems about
normal. A 486 33Mhz is required for overall ST 100% speed.

Positive Comments :

Gemulator emulates the ST quite well. Although Darek has some touchups
to put on some routines, he has done an excellent job so far, in getting
this emulator up and running ST software. I works well with OS/2, as
long as you remember to adjust your DOS settings to give Gemulator the
5.25 megs of XMS memory it wants to load into. As PCs get faster and
faster, Gemulator will be able to run your ST software faster as well.

Negative Comments :

My opinion, is that this product, although quite an achievement, was
released too early. When your advertisements indicate that "Gemulator

makes your favorite Atari ST software 100% PC compatible", "Share PC's
disk drives, hard drives and printers", "Reads all ST disks", "Runs
Pagestream, Calamus, Flash, GFA Basic, LDW Power, etc ", and the
released version fails to live up to the expectations, there are going
to be a lot of disappointed people. Listed are some of the problems I
have encountered so far.

WINDOWS mode

When you are running Gemulator in a window, the Atari mouse pointer
(which becomes active when you move the Windows mouse pointer inside the
DOS window), drifts away from the windows mouse pointer. This becomes
very annoying, having 2 different pointing devices on the screen, both
moving as you move the mouse, apart from each other. The good news is,
that you can use the Atari mouse alternate keys to align the 2 pointers
back together(ALT-arrow keys). The bad news, is for my system, they
were not long drifting apart. This problem occurs on running in an OS/2
DOS window as well.

HARD DRIVE ACCESS

Darek does not have the hard drive portion of the Gemulator software
completed yet. What he allows you in version 1.0, is the ability to
read only, the first 32 megabytes of your C partition. This will be
remedied sometime before the end of 1992, when he introduces a driver
which will allow you to read and write to all IBM hard drives, and read
from CDROM drives. Using the HDX HD boot program, I managed to get the
drive C icon on the screen, but most of the time I accessed drive C to
read, I was stopped promptly, by an Alert box "Your output device is not
receiving data [cancel] [retry] ". This problem was remedied by
switching to the Supra boot program. Many of the programs listed as
being supported, require a hard drive for proper installation to the
best of my knowledge (eg. Pagestream, Calamus, LDW power, Word Perfect).

NO RS232 SUPPORT

Although Flash is listed as a program you can run on your PC in both
pamphlets handed out at product shows, and PMC advertisements, there is
no support for the RS232 port at all, nor is there a mention of support
being added in future revisions. Perhaps this was an oversight, perhaps
not.

GFA PROBLEMS

GFA version 2.0 seems to run fine with Gemulator, but versions 3.05, 3.5
and 3.6 have some problems. The program will load in, and the screen
will clear and freeze up. I have found through several tests, that
using the Gemulator WINDOW mode mouse, and by clicking on the left mouse
button after the screen goes blank, the editor screen will then come up.
This forces you to run GFA from a window, but due to the mouse pointer
problems, and the extreme slowness that the windowed screen offers, this
is not very usable. This would appear to be a minor timing problem,
that should be easily remedied.

COPY PROTECTED DISKETTES

Gemulator does not read most copy protected disks. Considering the two
computers use completed different floppy controllers, it is doubtful
that protected disk support will be added. It was interesting to see
Gemulator load in Dungeon Master to the introduction, but then the mouse

got very confused, and it would not recognize my disk as the original
disk after checking for copy protection. Flight Simulator loaded up,
and the screen displays looked fine, but the mouse up/down was inverted,
and the keys for the throttle would not respond at all.

It would appear there are still a fair number of problems to resolve on
the keyboard/mouse routines, before Gemulator will handle the larger
portion of games (that it can get by the copy protection on).

Some games which would load in, and use VBIs to have smooth scrolling,
seemed to flicker excessively. This was also evident on the load in
sequence of Gunship by Microprose.

HI DENSITY FLOPPY SUPPORT

Although Gemulator supports read and write access to the IBM high
density 5.25" and 3.5" drives, you are only able to format your floppies
in 360K and 720K from the Atari format disk screen. TOS 2.06 has
support for high and low density floppies, so perhaps this will be added
in the future.

WHAT IS NOT EMULATED (above the hard drive & RS232 restrictions)

Sound, Midi, joysticks & the blitter chip are not emulated. According
to the text file on the disk, over the next year, support will be added
for the sound, midi, and the joystick. As I recollect, Darek was
working on the blitter emulation to speed things up at the Toronto Atari
Computer Exhibition (spring 1992), but I see no mention of it in any of
the information I have.

Suggestions for Gemulator :

Hopefully, as Darek adds in these new features, he will have them as
selectable items on his software menu, so that if you wish to run
business applications, you do not need to enable the sound/midi/joystick
rs232, etc, thus getting as much speed out of your application as
possible or at least, minimize memory requirements.

A save configuration would be useful from the Gemulator main menu, and
would load in as a default.

Attain more beta testers with various system configurations, so that
software revisions do not get out with an extensive number of bugs.

Send out software updates A.S.A.P., before too much negative press
dampens out sales.

Add in support for high density 3.5" floppy formatting from TOS 2.06.

Summary :

Gemulator has been shipping since mid-September 92, and yet, in my
opinion, several of the advertised features, have yet to be implemented
or be debugged. The next software release, will speed the program up
for use with the 486 and allow you to emulate a 4 meg ST. Although the
hardware requirements for 100% ST speed are high, it is a programming
marvel, and whether or not this product is for you, you will have to be
the judge. I bought Gemulator in the hopes of using it for programming
cross development with requirements for RS232 and hard drive support.
From what I have learned about the current product, I will have to wait

for support in the form of new software updates over the next 6-12
months.

Article by

Don Liscombe
SysOp of The Brewery BBS   - AtariNet 51:5/0 - Fnet node 66
416-683-3089 HST Dual 14.4 - Supporting the Atari ST & IBM PC

Gemulator is available from

Purple Mountain Computers,Inc.
15600 NE 8th St.
Suite A3-412
Bellevue, WA
98008
voice 206-747-1519

Gemulator information can be obtained either from PMC, or

Branch Always Software(Darek Mihocka)
14150 NE 20th St.
Suite 302
Bellevue, WA
98007
voice/recording 206-885-5893

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THE Z*NET COMPUTER CALENDAR 1992-1993
Schedule of Shows and Events
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November 16-20, 1992
Fall COMDEX, the biggest computer trade show in the USA with 2 million
square feet of show floor. Atari will again have a major presence at
the Las Vegas, Nevada show, and has been soliciting for up to 50 third-
party developers to participate in the huge Atari area at the Sands
Convention Center, and Atari will have the largest booth in the entire
Sands complex (Booth #2824). The Falcon line of computer is expected to
dominate the Atari booth, with outstanding demonstrations for the dealer
and distributor attendees to consider. COMDEX is where dealers and
distributors make their marketing decisions of what to carry in their
stores for the coming year. It's said that a glimpse of future Atari
machines may be seen as well. Contact Bob Brodie at Atari Corp for
information on attendance or exhibiting at COMDEX, 408-745-2052.

December 4-6, 1992
The Computer Graphics Show 1992 at the Jacob Javitz Convention Center

in New York City. This is a CMC event. For more information call;
(203) 852-0500, extension 234.

January 6-9, 1993
MacWorld Expo in San Fransisco California, Sponsored by MacWorld
Magazine. Titled San Fransisco '93 at the Moscone Center.

January 13-16, 1993
The Winter Consumer Electronics Show comes to Las Vegas, Nevada. CES is
an electronic playground, with everything in the way of high tech toys
for kids and adults. Game consoles and hand-held entertainment items
like the Atari Lynx are big here, and Atari will attend with a hotel
suite showroom. Contact Atari Corp for more information on seeing their
display at 408-745-2000.

January 15-18, 1993
NAMM is the largest conclave of musicians each year. Held in Los
Angeles at the Anaheim Convention Center, the variety of sights at the
National Association of Music Merchandisers is wilder than at
Disneyland, just next door. Atari was the first computer manufacturer
to ever display at NAMM in 1987, and has become a standard at the shows.
A trade show for music stores, distributors, and professionals of every
strata, entertainers are seen everywhere at NAMM. Contact James Grunke
at Atari Corp for more information at 408-745-2000.

March 1993
CeBIT, the world's largest computer show with 5,000 exhibitors in 20
halls, is held annually in Hannover, Germany. Atari traditionally
struts its newest wares there, usually before it's seen in the USA or
anywhere else. In '93, the Atari 040 machines should be premiering, and
this is the likely venue. Third party developers also use this show to
introduce new hardware and software, so expect a wave of news from CeBIT
every year. Atari Corp and the IAAD coordinate cross-oceanic contacts
to promote worldwide marketing of Atari products, and this show is an
annual touchstone of that effort. Contact Bill Rehbock at Atari Corp
for information at 408-745-2000.

March 13-14, 1993
The Sacramento Atari Computer Exposition is to be sponsored by the
Sacramento Atari ST Users Group (SST) at the Towe Ford Museum in
Sacramento, California. This show replaces the earlier scheduled, then
cancelled Northern California Atari Fest for the Bay Area, to have been
held in December 1992. A major two day effort, the SAC show is being
held in the special events area of the Towe Ford Museum, home of the
worlds most complete antique Ford automobile collection. As an added
bonus, admission to the museum is free when you attend the Expo. The
museum is located at the intersection of Interstates 5 and 80, just 15
minutes from the Sacramento Metropolitan Airport. Contact Nick Langdon
(Vendor Coordinator) C/O SST, P.O. Box 214892, Sacramento, CA 95821-
0892, phone 916-723-6425, GEnie: M.WARNER8, ST-Keep BBS (SST) 916-729-
2968.

August 3-6, 1993
MacWorld Expo at the Boston World Trade Center, Bayside Exposition

Center and sponsored by MacWorld Magazine. This event is titled Boston
'93.

September 18-19, 1993
The Glendale Show returns with the Southern California Atari Computer
Faire, V.7.0, in suburban Los Angeles, California. This has been the
year's largest domestic Atari event, year after year. Contact John King
Tarpinian at the user group HACKS at 818-246-7286 for information.

September 20-22, 1993
The third MacWorld Expo, titled Canada '93 at the Metro Toronto
Convention Centre, sponsored by MacWorld Magazine.

INSTALLING A HIGH DENSITY DRIVE IN YOUR MEGA STE
By Kevin Conway
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Some time ago, I owned a 130XE and though that its 90K disks were more
enough to hold everything that would ever want. Now that I have an ST,
no floppy disk seems to be big enough to hold all of the stuff that I
might want to stuff on it.

The new Mega STe has Tos 2.06, the Ajax chip and a 1.44 Mb disk drive.
Some of the older machines, such as what I bought, have Tos 2.05, no
Ajax chip and a 720K disk drive. The availability of these three
components is fairly good, but, despite rumour, and conjecture, it is
only necessary to exchange the Ajax chip for the Western Digital floppy
controller, and install a high density drive.

Any standard 3.5 inch, 1/3 height high density floppy drive should work
in your system. I purchased a Panasonic device and am quite pleased
with it.

Be aware that the Epson drive <Epson SMD-380> that Atari uses in the
Mega has a custom faceplate. This faceplate will only fit on a Epson
drive. To my understanding, the high density Epson drive is an Epson
SMD-340. If you choose to use a drive other than Epson, you will either
have to remove the faceplate from the drive, or cut the casing on your
Mega to fit the drive's faceplate.

The disk ejector button in the drive that I purchased does not fit
through the hole that is provided for Atari's mechanism, so I have to
poke a screwdriver through the hole to push the button. Since I have
over six months left on my warranty, I am reluctant to deface the
machine as of yet. In strict legal terms, I voided the warranty when I
removed the top cover and put the new drive in, but in my mind it is far
easier for the dealer to return a machine will still looks to be stock
should I have major problems in the future.

To get the high density drive working in your Mega STe, you will need to
do the following:

1. Replace the Western Digital floppy controller chip with an Ajax
    chip. This chip is located under the hard drive cover. Your dealer

can identify and replace this quite quickly.

2. Find the small set of dip switches in the hard drive bay. Flip
    switch seven to on. It should be the only one that is on. This
    will enable high density formatting.

3. Remove the top cover from your Mega and remove the floppy drive.
    The floppy drive is connected to the main system by a data cable and
    a power cable. It is, in turn, attached to the top cover by a
    mounting assembly. Don't try to move the top cover too far without
    disconnecting these first.

    Also, there is a small led attached to the top cover that serves as
    the power on light. You should disconnect this also.

4. Check to see that the new drive is set as D0 (drive zero). Also
    make sure that the RDY jumper is removed.

5. Mount the high density drive in the place of the Atari mechanism.
    Note that the data cable has a thin red line on one side. This is
    connected to pin 1 on the 34-pin connector. The drive should
    indicate either where pin 1 or pin 2 should be connected. Make sure
    that the side of the data cable that has the thin red line is
    attached on the same side as pin 1 or pin 2 of the drive.

    Reconnect the power cable to the drive. This cable only goes in
    one way. Make sure you don't force it in, as it should clip into
    place quite naturally. If it is reversed, you will fry the drive
    when you power up your Mega. Quite costly and quite smelly too.

6. Put the top cover back into place and test the machine. You should
    now be able to format High Density disks in High Density.

When you format from the desktop, you will see that you have the option
of single sided, double sided and high density. Again, this option only
appears if you flip dip switch 7.

If when you test the drive, nothing happens, the data cable may be in
the wrong way. This does not harm the drive. Just flip it over and it
should work fine. If not, you have a problem.

It's probably not a good idea to put the screws for the top cover back
in until you have the drive working properly. It saves aggravation on
having to put them in and take them out over and over again.

Having done all of the above and successfully tested the drive, you
should be able to read and write High Density disks on your STe and
exchange disk with IBM systems.

I have heard some people complain that have had problems reading STe-
formatted high density disks on an IBM. There is a program in the
public domain called FDCPATCH will load the High Density floppy cookie
into the cookie jar. Apparently Tos 2.05 does not update the cookie jar
properly, resulting in problems when reading on IBM systems.

With the FDCPATCH program loaded, I have been able to write to High
Density disks and load them successfully on IBM systems. I also have
been able to save from the IBM and load on the STe without problems.

Having a High Density disk allows me greater disk storage for hard drive

backups as well as allowing me to exchange data more efficiently with
other systems. My STe is a business work-horse; having the High density
floppy makes this workhorse all the more valuable.

Now, having pulled the Epson mechanism out of the STe, you will have a
spare drive that can be used a 'B' mechanism. It is quite simple to
hook this up. To do this, you will need the following supplies and
tools:

    1 - 34 pin drive connector
    1 - Six-foot Atari ST disk drive cable
    1 - Four pin drive power connector (small)
    1 - Four pin female power supply power connector (large)
    1 - Ohmmeter
    1 - Soldering iron and solder

You will need to do the following:

1. Cut the drive cable in half.
2. Expose the wires from the cable and strip the ends.
3. Solder the exposed ends of the wires to the 34-pin connector as per
    the instructions below.
4. Remove the plate covering the VME bus on the back of the STe. This
    is also the Serial 2 port. Disconnect the data cable for the Serial
    Port 2.
5. Pull the spare <hard drive> power supply cable through the back of
    the STe. This will be used to power your floppy.
6. Solder the large female power and the small drive connector
    together. Make sure that you have the right connections as a
    mistake will blow your drive. Using cables from an old power supply
    or buying new cables will allow you to solder the wires together by
    color - this will save costly mistakes.
7. Plug it all in and test it. You may find that your solder
    connections are loose, break or just not good enough and may need to
    do them over again.

Following these instructions should give you a working 'B' drive from
your spare Epson mechanism.

The pin out of the atari plug is below.

            10   11
         8   9
      6 12 13 7
           2   3
               1

The following connections need to be made:

Atari Plug   34-pin Connector

    1   30
    2   32
    3   3
    4   8
    5   10
    6   Not Connected
    8   16
    9   18
    10   20

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11                                        22
12                                        24
13                                        26
14                                        28
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A more complete description of the steps to creating a 'B' drive can be
found in the 'teacdriv' archive on Canada Remote Systems.

This documentation is provided for information only. I will make no
guarantees as to the suitably or applicability of this information to
your system. Following these instructions _will_ void your warranty.

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8-BIT OWNERS UPDATE
By Jeff Potter
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    The J.D.Potter Collection of Graphics File Conversion Utilities

My collection of graphics picture file conversion utilities were
developed to allow the users of the classic 8-bit Atari computers access
to the myriad graphic files previously available only to other
computers.

Some of these work with the APAC mode, which is a combination of
graphics 9 and 11 which provides 256 different colors on-screen at once.
(Note that APAC mode may not work well with certain monitors. It does
work well with ordinary television sets. Contact me for information on
monitors if you are uncertain).

Other programs of mine work with a new mode (which I created) called
ColorView. ColorView provides 4096 colors in 80 x 192 pixel resolution,
or 64 colors in 160 x 192 pixel resolution. All products with ColorView
also allow interactive color tuning from the keyboard, so you can set
the color for your system without adjusting your monitor or television's
color controls. ColorView also works on all monitors, including those
which APAC does not.

APACVIEW
This program is both a decoder and viewer for GIF picture files. It
lets you load GIF files and view them in one of several modes: Graphics
9, APAC, or Graphics 15. You may then save them in APAC mode, or create
three-color separations for use with COLRVIEW (available separately).
You can use a joystick to interactively choose areas of the image to
"zoom in on". Version 2.4 lets you view certain newer files that
earlier versions failed to load, as well as fixing some other
shortcomings.

APACSHOW
This is a slideshow program that loads APAC mode files from disk for
display one after another. A random-pixel dissolve from one image to
another occurs every several seconds, which can be interrupted and

restarted.

COLRVIEW
This program is the viewer for ColorView files created with APACVIEW, or
downloaded from Bulletin Boards. The latest version (2.6) lets you view
all the ColorView files on a disk in "slideshow" mode.

DEGASRD
This program lets you view Atari ST Degas format (standard or
compressed, any resolution) in Graphics 9 or 15 monochrome, or in
ColorView's 64 or 4096 color modes. Version 1.1 provides the same
"slideshow" feature mentioned above.

GIFNCODE
This program allows you to load four popular Atari picture formats
(MicroPainter, Micro Illustrator/Koala, Graphics 8 and 9) and convert
them to GIF files. This can be done interactively, letting you convert
an entire disk of pictures one after another without memorizing the
filenames. This is useful for Atarians who want to exchange their
pictures with other computer users via bulletin boards.

ILBMREAD
This program lets you load and view Amiga IFF pictures in APAC mode.
The flexible joystick interface allows you to select rectangular
sections of the image for further inspection. ILBMREAD also saves the
output in APAC mode.

All programs come with DOC files to help you understand all the
important features. I also give advice on where to find source pictures
for the various formats. I include my mail address as well as my e-mail
address for GEnie and CompuServe, as I am always glad to receive
feedback and fix any problems that may arise.

All programs released so far are shareware, but if you cannot find them
on your local bulletin board or pay service, they can be ordered
directly from me at the following prices:

PROGRAM   VERSION   PRICE
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APACVIEW   2.4   8.50
APACSHOW   2.3   6.50
COLRVIEW   2.6   8.50
DEGASRD   1.1   8.50
GIFNCODE   1.0   6.50
ILBMREAD   2.1   6.50

Special price on APACVIEW/COLRVIEW combination: $16.00. Prices include
postage and handling, in U.S. dollars (money orders preferred, personal
checks accepted). Printed docs will be supplied. Disks will be SSSD
unless specified otherwise (I can provide up to DSDD). The spare disk
space will be filled with sample pictures usable by the selected
program. Please include your full mailing address.

Hope to hear from YOU soon!

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LURE OF THE TEMPTRESS REVIEW
By Patricia Barbiero
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The manual proclaims that ". . .Lure of the Temptress is the first
Virtual Theatre game ever in the entire history of the whole solar
system." after my first experience with this game, I can't wait to see
what Revolution software and virgin Games produces next!

Virtual Theatre is the latest concept in role playing games where you,
the player is involved in a real life scenario. The game is full of
characters who go about their lives independently of you and your
actions. These characters carry on conversations, gossip and also have
their own individual personalities. You can join the village day to day
life, gossip, chat with, and question the various people you meet in
your explorations of this fascinating world.

You are Diermot, a quiet and unassuming man caught up in a swirl of
events that are beyond your control. A loyal subject of the King, you
follow him to quell a revolt backed by a woman named Selena in the small
village of Turnvale. As the game begins, you awaken from
unconsciousness after a terrible battle that you prefer not to remember.
You find yourself in a damp dungeon cell, where rats scurry by your
feet, the bed is a dirty pile of straw, and a storm rages outside. A
crack in the wall reveals a serf tortured by the Skorl, the same evil
creatures that have imprisoned you. It is here in the dungeon that you
will meet young Ratpouch, a most endearing, well intentioned rascal, who
will become your constant loyal companion throughout your adventures.
Ratpouch is very useful, and can be given very extensive and complicated
instructions which he will very cheerfully carry out to the best of his
ability. Once you have outsmarted the Skorl and escaped from the
dungeon with Ratpouch, the village of Turnvale and its inhabitants
unfolds before you.

The only word to describe the village of Turnvale is picturesque. The
graphics in this game are wonderful, with attention to detail that makes
the game that much more realistic. Displayed in ST low resolution and
16 colors, more attention is given to the artistry of the graphics than
attempt to overwhelm the player with a multitude of colors. The picture
is extremely crisp and clear because of the use of black as both a
foreground and background color. Many of the scenes give the player the
sense of peeking through the trees or bushes to watch the action going
on, and the aforementioned use of the color black is extremely important
in adding to this effect. The few sound effects emphasize and add to
the atmosphere and help to lure you deeper into the game, instead of the
usual overkill of noise and music that can often be distraction. The
minimal use of both color and sound provide the player with a very
aesthetically pleasing game that is not only fascinating, but also
relaxing.

Gameplay is completely controlled by the mouse, and Diermot is easily
controlled by the point and click method. Items can be examined or
manipulated simply by pointing at the object and holding down the right
mouse button. A menu of options will appear and is easily scrolled

through. Conversing with people also works by the same method, and the conversation will unfold before your eyes. You can also eavesdrop upon others, and sometimes these conversation can be quite humorous. Just a little warning though, you need to be careful what you say and how you treat others, because just as in any other small village, the inhabitants love to gossip and rumours that can hurt your reputation can spread behind your back. The trick to the game is to look at and listen to everything, albeit discreetly as possible!

Being a novice at role-playing games--actually I don't even qualify as a novice, since I can never get very far on most of the typical role playing programs--I have found this game to be very flexible to the skills of the player. I can play this game without have to constantly restore my game after getting slaughtered in a variety of ways. At the same time, my husband the expert finds the game challenging to his skills. It is a game that requires a good deal of thought and inspiration rather than skill at hand to hand combat (although you can not escape some fighting!). I find this a refreshing change in this type of game, since all too often the typical game merely tries to match the intensity and complexity of Dungeon Master. Instead, Revolution Software has tried a completely different and interesting approach which very well may change the way the graphic adventure is produced in the future.

On the down side, albeit a small down side for some reason the gentlemen at Revolution Software did not see fit to make the game installable on a hard drive. The game comes on four floppy disks and is rather slow in initially loading and accessing throughout the game. Every time Diermot tries to proceed to the next screen the player is left waiting for the screen to load. This does not take more than a few seconds, but if you are trying to move quickly through several screens it can be a little frustrating! However, for a game based on a brand new concept, and of such complexity, I am surprised to find that this is the only real problem with regard to playability. I'm sure that this problem will be corrected in future games produced by Revolution Software.

I have not completed this game yet, and I am looking forward not only to finishing it, but to actually playing it. I am enjoying it very much, and am very excited at the prospect of other games like it being produced. I am extremely impressed with the concept of Virtual Theatre and hope that with a continued emphasis on the game content and story, this will define graphic adventures as something more than grammar exercise or a lesson in constant violent combat.

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